Year 5		Beginning	Within	Secure	End of Year Expectations
Using and Applying	**Problem solving**	Solve number problems and practical problems that involve all of the number system section. Solve problems involving number up to three decimal places. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. Solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.			
Number	**Number system**	I can read, write and order numbers to at least 10,000 and determine the value of each digit. I can count forwards in tens, hundreds and thousands without crossing boundaries. I can count forwards and backwards on a number line crossing through zero. I can round any number to the nearest 10, 100 and 1000 with any number to 100 000 To read Roman numerals to 100.	I can read, write and order numbers to at least 100,000 and determine the value of each digit. I can count forwards and backwards in tens, hundreds and thousands without crossing boundaries. I can recognise negative numbers in contexts. I can round any number to the nearest 10, 100, 1000, 10 000 to any number up to 500 000. To read Roman numerals to 500.	I can read, write and order numbers to 1 000,000 and determine the value of each digit. I can count forwards and backwards in tens, hundreds and thousands crossing boundaries. I can solve simple problems involving negative and positive numbers and order them. I can round any number to the nearest 10, 100, 1000, 10 000 and 100 000. To read and write Roman numerals to 1000.	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

	Fractions and decimals	I can use a fraction wall to compare fractions using < and > signs. I can find equivalent fractions using resources (e.g. fraction wall, images etc). I can use images and resources to record mixed numbers. I can add and subtract fractions with the same denominator. I can use a number line with a scale (or resources) to multiply a mixed number by a whole number. I can read and write fractions and convert them to decimal numbers using resources. I can divide a number by 10 or 100 to find tenths or hundredths and explain the value of the digits. I can identify the 'decider' digit and explain if it needs to be rounded up or down (e.g. 5, 6, 7,8, 9 = round up). I can read, write, order and compare whole numbers. I understand that percentage means 'parts of a hundred'. I can covert fractions to decimals and percentages and vice versa (1/2, ¼, ¾,).	I can order fractions on a number line and compare them. I can find equivalent fractions using patterns. I can use images and resources to covert improper fractions to mixed numbers and vice versa. I can add and subtract fractions with different denominators by using resources to help me find an equivalent fraction. I can use a number line with a scale (or resources) to multiply an improper fraction by a whole number. I can convert decimal numbers and fractions without using images. I can divide a number by 1000 to find hundredths and explain the value of the digits. I can round a number with 1 d.p. to a whole number and explain my thinking. I can read, write, order and compare numbers with 1 d.p. I can write percentages (e.g. 5/100) using images and models. I can covert fractions to decimals and percentages and vice versa (fifths).	I can multiply a fraction so that it has the same denominator as another fraction and then compare them. I can find equivalent fractions by multiplying or dividing numerators and denominator. I can convert mixed numbers and improper fractions and explain my thinking. I can convert fractions using my knowledge of equivalences and then add or subtract them. I can multiply improper and mixed numbers by a whole number and simplify my answer (where possible). I can read and write decimal numbers as fractions and express them in their simplest form. I can write the decimal equivalents to fractions with tenths, hundredths and thousandths. I can round a number with 2 d.p. to 1 d.p. and explain my thinking. I can read, write, order and compare numbers with 2 d.p. I can write a given percentage as a fraction and record my answer as a decimal (e.g. 70%=70/100 or 7/10=0.7). I can covert fractions to decimals and percentages and vice versa (denominators tenths)	Compare and order fractions whose denominators are all multiples of the same number. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. 2/5 + 4/5 = 6/5 = 1 1/5). Add and subtract fractions with the same denominator and multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. Read and write decimal numbers as fractions (e.g. 0.71 = 71/100). Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places. Recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator hundred, and as a decimal fraction. Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those with a denominator of a multiple of 10 or 25.

Calculating	**Addition and Subtraction**	I can add four digit numbers to four digit numbers and show carrying. I can subtract four digit numbers from four digit numbers using a formal written method and show exchanging. I can add and subtract up to four digit numbers mentally (using partitioning or number line to explain my workings). I can use my knowledge of rounding to the nearest 10, 100 and 1000 to make an estimation.	I can add whole numbers greater than 4 digits using a formal written method. I can subtract four digit numbers from numbers with more than four digits using a formal written method and show exchanging. I can add and subtract decimals to 1 d.p. mentally and explain my workings. I can use my knowledge of rounding to the nearest 10, 100, 1000, 10 000 to make an estimation.	I can add several numbers together with different with different place values (including decimals in the context of money). I can subtract whole numbers greater than 4 digits using a formal written method and explain my workings. I can add and subtract decimals in the context of money mentally and explain my workings. I can round decimals to the nearest integer. I can use my knowledge of rounding to the nearest 10, 100, 1000, 10 000 and 100 000 and round money to the nearest pound to make estimations.	Add whole numbers with more than 4 digits, including using formal written methods (column method). Subtract whole numbers with more than 4 digits, including using formal written methods (column method). Add and subtract numbers mentally with increasingly large numbers. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

	Multiplication and Division	I can explain what a factor is and identify factors of a numbers. I can count in multiples of a given number. I am aware of what a composite number is. I can use resources to establish whether a number is a prime number or composite number. I can multiply a four-digit number by a one-digit number. I can use partitioning to multiply numbers mentally. I can divide numbers by using my knowledge of halving. can divide a two-digit number (with a remainder) by a one-digit number using short division with jottings.	I can find factor pairs of a numbers. I can identify multiples up to 12x12. I can explain what a prime number is. I can identify and recall prime numbers up to 19 using my knowledge of factors and multiples. I can multiply two and three -digit numbers by a two-digit number. I can use multiplication/division facts and multiplying b y10 and 100 to help me divide numbers (e.g. 360 ÷ 4 = 90 could do 36÷4 = 9 and multiply by 10). I can divide a three-digit number (with a remainder) by a one-digit number using short division with jottings.	I can find common factors of numbers (e.g. 5 is a factor of 20 and 15). I can identify common multiples of a number. I can use my knowledge of factors and prime numbers to identify prime factors. I can identify prime numbers up to 100 and explain why a composite number is not a prime number. I can multiply a four-digit number by a two-digit number efficiently. I can use rounding and adjusting, partitioning, or known multiplication and division facts and explain my workings. I can divide a four-digit number by a one-digit number and explain what the remainder means e.g. rounding up or down in the context of a problem.	Identify factors, including finding all factor pairs of a number, and common factors of two numbers. Identify multiples. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. Multiply and divide numbers mentally drawing upon known facts Divide numbers up to 4 digits by a one-digit number using formal written method of short division and interpret remainders appropriately for the context

		I can multiply and divide whole numbers by 10 and 100 using resources. I am aware of what a square number is and use resources to find them.	I can multiply and divide whole numbers by 10, 100 and 1000. I can identify and recall square numbers to 12x12.	I can multiply numbers to 1 d.p. by 10, 100 and 1000. I can explain what a cubed number is and calculate simple cubed numbers.	• multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 • recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)

Year 5		Beginning	Within	Secure	End of Year Expectations
Geometry	**Properties**	I can identify 3D shapes and describe some of their properties. I can identify and order acute and obtuse angles. I can use a protractor to draw acute and obtuse angles using the top scale. I can find missing angles in a right angle. I can identify rectangles and describe some of their properties (adjacent sides, lines of symmetry, parallel and perpendicular lines etc.). I can identify and describe the properties of polygons (sides, corners/vertices and lines of symmetry).	I can identify 3D shapes from 2D representations and describe their properties. I can order and compare acute, obtuse and reflex angles. I can use a protractor to draw acute and obtuse angles using the bottom scale. I can find missing angles on a straight line. I can describe the properties of rectangles in different orientations. I can identify regular and irregular polygons and explain the differences regarding the length of sides (same).	I can identify the nets of 3D shapes. I can estimate with reasonable accuracy the size of an acute, obtuse or reflex angle. I can use a protractor to draw acute and obtuse angles to within 2˚ of accuracy. I can find missing angles around a point. I can solve problems related to finding the missing lengths of rectangles. I can identify regular and irregular polygons and explain the differences regarding the interior angles (same size).	Identify 3D shapes, including cubes and other cuboids, from 2D representations. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees (°) . Identify angles at a point and one whole turn (total 360°) angles at a point on a straight line and 1⁄2 a turn (total 180°) other multiples of 90°. Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

	Position and direction	I can move a shape left/right and up/down. I can reflect a shape using or a mirror.	I can translate a shape and recognise that its size in not affected. I can reflect a shape using a mirror in a vertical or horizontal line.	I can draw and translate a shape and record its position with coordinates. I can reflect a shape using a mirror in a vertical, horizontal or diagonal line and write its coordinates.	Identify, describe and represent the position of a shape following a translation, using the appropriate language, and know that the shape has not changed. Identify, describe and represent the position of a shape following a reflection, using the appropriate language, and know that the shape has not changed.
Measurement		I can recall there are 1000g = 1kg, 1000ml = 1L, 1000m = 1km and convert whole measures I can recall metric units and what I would measure with them (e.g. length of playground with m). I can calculate the perimeter of rectilinear shapes by adding lengths or counting squares. I can find the area of shapes by counting squares and use cm^2 or m^2 in my answer. I can make a reasonable estimate regarding the volume of a liquid. I can solve simple problems where I have to convert seconds, minutes, hours, days, weeks, months and years.	I can recall there are 100cm in 1m and 10mm in 1cm and convert whole measures. I can identify imperial units and what I would measure with them (e.g. liquids with pints). I can calculate the perimeter of composite rectilinear shapes where all the lengths are given (counting squares or adding lengths). I can find the area of shapes by multiplying the length by the width. I can make cubes and cuboids with resources and find the volume by counting blocks. I can solve simple problems (without crossing the hour boundary) where I have to convert analogue and digital times	I can use conversions to convert decimal measures (e.g. 0.08km=80m or 2300m = 2.3 km) Using equivalences I can convert imperial and metric units to solve problems. I can calculate the perimeter of a composite rectilinear shape with some missing side lengths. I can make a reasonable estimate regarding the area of an irregular shape by counting squares or parts of squares. I can calculate the volume of a cuboid by using the formula lxwxh. I can solve simple problems (crossing the hour boundary) where I have to convert analogue and digital times	Convert between different units of metric measure -(e.g. kilometre and metre; -centimetre and metre; -centimetre and millimetre; -gram and kilogram; -litre and millilitre). Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes. Estimate volume (e.g. using 1 cm3 blocks to build cubes and cuboids) and capacity (e.g. using water). Solve problems involving converting units of time.
Statistics		I can interpret a line graph and retrieve simple information. I can find the sum and difference of information presented in a range of tables.	I can interpret a line graph and retrieve information that is presented between intervals on a scale. I can read timetables and retrieve information.	I can use a line graph to make estimates and compare two readings from the same graph and explain them. I can read and interpret timetables to calculation durations of time.	Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables, including timetables.

Year 6		Beginning	Within	Secure	End of Year Expectations
Using and Applying	**Problem solving**	Use their knowledge of the order of operations to carry out calculations involving the four operations. Solve problems involving addition, subtraction, multiplication and division Solve number and practical problems. Solve problems which require answers to be rounded to specified degrees of accuracy. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. Solve problems involving the calculation of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparison. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.			
Number	**Number system**	I can read, write and order numbers up to 5 000 000. I can round numbers to the nearest whole number (integer). I can read and order negative numbers using a number line.	I can read, write and order numbers up to 8 000 000. I can round numbers to the nearest integer, 1 and 2 decimal places. I can explain how to order negative and positive numbers and find the difference between pairs of negative numbers e.g. use a blank number line for workings.	I can read, write, order and compare numbers to 10 000 000. I can round numbers to any required decimal place. I can solve problems involving negative and positive numbers in the context of money and temperature.	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit Round any whole number to a required degree of accuracy Use negative numbers in context, and calculate intervals across zero

	Fractions and decimals	I can identify common factors of numbers. I can identify common multiples of numbers. I can use a fraction wall to help me compare and order fractions. I can use models and images to support me adding and subtracting two fractions with different denominators. I can use images and resources to multiply fractions that have different denominators. I can use images and resources to divide a fraction by a whole number. I can read and write simple decimal numbers as fractions e.g. 0.125 = 1/8. I can use resources to multiply and divide whole numbers by 10, 100 and 1000 and identify the value of each digit. I can multiply a one-digit number with 1 d.p. using partitioning (e.g. 7 x 4.3 = 30.1 because 7 x 4 = 28 and 7 x 0.3) I can divide a number where the answer has up to 1 d.p. (I might x the number by 10 or 100 to remove the decimal point and then ÷ the answer by 10 or 100). I can identify equivalent fractions, decimals and percentages.	I can reduce fractions to their simplest form by dividing the numerator and denominator by a common factor. I can multiply a fraction by a common multiplier so that it has the same denominator as another fraction e.g. 1/5 x 2 = 2/10 so I can compare 2/10 and 6/10. I can convert improper fractions to mixed numbers, simplify the fraction, order and compare them. I can add and subtract more than two fractions with the same denominator and convert the answer to a mixed number. I can multiply fractions that have different denominators and numerators greater than 1 and express the answer in its simplest form. I can explain how to divide a fraction by a whole number. I can read and write equivalent decimals for fractions and mixed numbers. I can multiply and divide decimal numbers to 1 d.p. by 10, 100 and 1000 and identify the value of each digit. I can multiply a one-digit number with 2 d.p.using a written method. I can divide a number where the answer has up to 2 d.p. I can convert percentages to equivalent fractions and solve simple word problems.	I can solve problems and express fractions in their simplest form. I can compare fractions with the same denominators using < and > signs. I can compare and order a range of fractions e.g. proper, improper and mixed numbers. I can add and subtract fractions with different denominators by finding common denominators and express the answer in its simplest form. I can solve problems where fractions need to be multiplied and express the answer in its simplest form. I can solve problems where fractions need to be divided. I can apply my knowledge of decimal fraction equivalents to solve problems. I can solve problems and explain how to multiply and divide decimal numbers to 3 d.p. by 10, 100 and 1000. I can solve word problems in a range of contexts where multiplication of decimals is required. I can solve word problems in a range of contexts where division results in a decimal answer. I can solve complex word problems where I need convert amounts given e.g. to all fractions and find percentage increases or decreases.	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Compare and order fractions, including fractions >1 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1/4 x 1/2 = 1/8) Divide proper fractions by whole numbers (e.g. 1/3 ÷ 2 = 1/6) Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3/8) Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places Multiply one-digit numbers with up to two decimal places by whole numbers Use written division methods in cases where the answer has up to two decimal places Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Calculating	**Addition and Subtraction**	I can solve one-step addition and subtraction problems using a formal written method and numbers with different place values. I can estimate by rounding to a multiple of ten and explain my mental workings.	I can solve two-step problems involving addition and subtraction using a formal written method and numbers with different place values. I can estimate by using rounding to the nearest whole number and explain my mental workings.	I can break down complex problems into smaller steps and solve them. I can estimate by rounding to the required level of accuracy or use adjusting and near doubles and explain my mental workings.	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.
	Multiplication and Division	I can multiply a 4 digit by two-digit number using long multiplication I can divide a 3 digit number (with a remainder) by a two digit number using a long division and express the remainder as a fraction. I can use rounding, adjusting, partitioning or know multiplication and division facts to solve one step mental calculations. I can identify common factors and common multiples of given numbers.	I can multiply decimals using long multiplication. I can divide a 4 digit number (with a remainder) by a two digit number using a long division and express the remainder as a fraction or decimal. I can use rounding, adjusting, partitioning or know multiplication and division facts to solve two step mental calculations. I can recall prime numbers up to 100.	I can solve multi-step problems related to multiplication. I can solve division problems and explain what the remainder means e.g. rounding up or down in the context of the problem. I have developed reliable mental strategies which I use to solve problems and I can explain them. I can solve problems related to factors, multiples and prime numbers.	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context Perform mental calculations, including with mixed operations and large numbers. Identify common factors, common multiples and prime numbers.

Year 6		Beginning	Within	Secure	End of Year Expectations
Geometry	**Properties**	I can describe the properties of 2D shapes using the language: symmetry, regular, irregular, parallel, perpendicular, bisect, acute, obtuse and reflex angles. I can draw the nets of cubes and cuboids and assemble them. I know angles in triangle equal 180˚ and can find missing angles. I can identify the radius, diameter and circumference on a circle. I can classify angles when they meet at a point.	I can draw 2D shapes using given dimensions regarding lengths. I can identify the nets of 3D shapes e.g. triangular prism, tetrahedron. I know angles in a quadrilateral equal 360˚ and can find missing angles. I know that 2 x radius = diameter. I can measure the radius and diameter on a circle accurately. I know when two lines cross each other the opposite angles will be equal and can calculate these when given values.	I can draw 2D shapes accurately: straight lines, vertices within 2 mm and angles within 2˚of accuracy. I can draw accurately the net of a 3D shape and describe its properties. I can deduce what angles in a polygon equal and find missing angles. I can use a compass to draw a circle accurately. I can solve problems related to missing angles when given some values.	Draw 2-D shapes using given dimensions and angles Recognise, describe and build simple 3-D shapes, including making nets Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

	Position and direction	With support I can read and write coordinates in all four quadrants. With support I can translate and draw shapes with some accuracy. I am aware of the x and y axis.	I can read and write coordinates in all four quadrants. I can select the resources I use translate and draw shapes accurately. I can identify the x and y axis correctly.	I can solve problems involving coordinates e.g. deduce missing vertices of shapes. I can translate and draw shapes accurately (e.g. straight sides and 2mm accuracy of vertices on squared paper).	Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
Measurement		I know the equivalences related to km, m, cm, mm, L and ml, g and kg and time. I am aware that miles are an imperial measure of length. I can calculate the area and perimeter of rectilinear and compound shapes. I can use the formulae for area and volume and apply them to rectangles and cuboids. I can find the area of parallelograms and triangles by counting squares. I can calculate the volume of cuboids when given the formulae.	I can read, write and convert measures on a range of measuring scales. I can use multiply or divide to convert miles or kilometers when given the conversion factor. I can investigate the perimeters of shapes with the same area and explain my findings. I can split a compound shape into rectangles and find the total area using the formula. I can find the area of triangles and parallelograms using given formulae. I can recall volume = lxwxh and can use it to find the volume of cuboids with different units of measure.	I can solve problems that included different units for measures and convert them e.g. a mixture of g and kg and all need to be converted to g. I can solve complex problems where the relationship between miles and kilometers is given. I know shapes with the same perimeter can have different areas and give examples. I can find missing lengths for area and volume problems. I can solve problems related to missing lengths. To solve problems related to missing lengths.	Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places Convert between miles and kilometres Recognise that shapes with the same areas can have different perimeters and vice versa Recognise when it is possible to use formulae for area and volume of shapes Calculate the area of parallelograms and triangles Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm3) and cubic metres (m3), and extending to other units such as mm3 and km3.
Statistics		I can retrieve information from line graphs and make estimates using pie charts. I am aware that mean means average and how to calculate it.	I can solve word problems related to pie charts (making links to percentages and fractions) and line graphs. I can find the mean of a small set of data (e.g. 6 items or less).	I can draw pie charts and line graphs and solve problems where two pie charts are compared. I can find the mean of a data set and explain its context within a problem.	Interpret and construct pie charts and line graphs and use these to solve problems Calculate and interpret the mean as an average

Algebra	I recognise that a missing number can be represented by a letter or a symbol in an equation. I know that 5n means 5 x n. I can substitute given values into the problem and solve it. I can use the given relationship between numbers in a function machine to generate new terms for a sequence. I can solve simple calculations where a missing value is found by using all four operations and brackets.	I can write a simple equation with one missing number in it using algebra. I can write the problem as an equation and solve it to find a missing value by substituting values in it. I can find patterns and write an algebraic expression for the simple relationship between numbers in a sequence (e.g. 4n) and use it to generate terms. I can find pairs of numbers that work in an equation and explain my workings.	I can read and write a complex problem as an equation with algebraic symbols. I can write the problem as an equation and calculate the value of more than one missing number. I can find patterns and write an algebraic expression for the relationship between numbers in a sequence (e.g. 5n-3) and use it to generate terms and nth terms. I am can solve simultaneous equations to find two unknown values.	Express missing number problems algebraically Use simple formulae expressed in words Generate and describe linear number sequences Find pairs of numbers that satisfy number sentences involving two unknowns Enumerate all possibilities of combinations of two variables.
Ratio and Proportion	I can identify the ratio related to two quantities and record it e.g. ratio of blue to orange is 5:3. I understand that scaling can lead to a shape becoming larger (if the scale factor is larger than 1) or smaller (if the scale factor is less than 1).	I can write ratios and reduce them to their simplest form. I can enlarge or reduce an object when given the scale factor.	I can solve problems where I use given information to find an unknown value e.g. ratio of milk to dark chocolate is 3:4 if I have 12 milk chocolates how many dark do I have? I can find the scale factor when comparing shapes.	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving similar shapes where the scale factor is known or can be found